

What is claimed is:

2/19/2004

1. A process comprising the steps of:  
providing a first batch of semiconductor material, and loading the first batch into a carrier for transport into a semiconductor manufacturing process, and while the first batch undergoes the manufacturing process, providing a second batch of semiconductor material, and pausing a second batch process operation until the first batch completes processing, to reduce the idle time of said process.
2. A process comprising the steps of:  
loading a first batch of semiconductor material into a carrier and installing the first batch in a process chamber and while the first batch is in the chamber charging the carrier with a second batch of semiconductor material, and pausing further operation of the second batch, while inspecting the first batch.
3. The process according to Claim 2, further comprising the step of:  
determining if the inspection is satisfactory.
4. The process according to Claim 2, further comprising the step of:  
determining if the inspection is unsatisfactory.
5. The process according to Claim 2, further comprising the step of:  
determining when to resume operation.
6. The method according to Claim 2, further comprising the step of:  
determining when to resume operation, based upon the result of the inspection of the first batch.

7. A process comprising the steps of:

loading a second batch of semiconductor material into a conveyor and installing the second batch in a process chamber before a first batch of semiconductor material has been processed and cooled.

8. A process adapted to heat and cool a substrate comprising the steps of:

forming a first batch of semiconductor material, and loading the first batch into a carrier, transferring the first batch to a heating mechanism, forming a second batch of semiconductor material, and loading the second batch into the carrier, while heating the first batch positioned within the heating mechanism; transferring the first batch between a position proximate the heating mechanism and a position proximate the coolable member, cooling the first batch positioned proximate within a cooling mechanism; and while the first batch completes the process, transferring the second batch to the heating mechanism, to reduce the idle time of the process.